# **BUREAU OF MINES AND MINE SAFETY**

# FINAL REPORT

**JANUARY 20, 2009** 

# FATALITY REPORT FROM JUNE 3, 2008

# GIBSON COUNTY COAL LLC GIBSON MINE



# PREPARED BY DONALD "BLINK" McCORKLE DEPUTY COMMISSIONER

## **Authority for Inspection**

The Bureau of Mines and Mine Safety (herein the "Bureau of Mines") exists as a bureau within the department of Labor by virtue of Ind. Code 22-1-1-4(1). Ind. Code 22-1-1-5(a)(4) requires the Bureau of Mines to investigate all fatalities occurring in underground mine operations for the purpose of data collection. Ind. Code 22-10-3-6 grants the Director (hereinafter the Deputy Commissioner of the Bureau of Mines) the authority to enter, examine, and inspect all commercial coal mines and facilities.

Pursuant to 30 U.S.C. 801 *et seq.*, (the Federal Mine Safety and Health Act of 1977, hereinafter "the act"), the Interagency agreement Between the Mine Safety and Health Administration U.S. Department of Labor dated March 29, 1979, the Mine Safety and Health Administration (hereinafter "MSHA") has jurisdiction over coal mines and each operator of a coal mine.

The investigation of this accident was done by the federal office of MSHA District 8 office in Vincennes, Indiana. MSHA was the lead investigator, with the Indiana Bureau of Mines accompanying MSHA pursuant to Indiana law for the purpose of collecting data.

Indiana Code 22-1-1-5 provides that the investigation of the Bureau of Mines shall not interfere with the investigations by MSHA. As nothing in state law gives the Bureau of Mines authority to assess fines, issue citations, or enforce abatement orders, the doctrine of preemption clearly accords federal MSHA the primary role as investigator.

#### **Overview of Accident**

At approximately 7:40 a.m. central daylight savings time on June 3, 2008, a fatal accident occurred in the #1 Entry of Unit #3 ID MMU 003 at the Gibson County Coal LLC's Gibson mine. The mine is located in Gibson County, Princeton, Indiana.

#### **Victim Information:**

Name: Justin M. Wilkin, age 25 Job Title: Roof Bolter Operator

Activity at time of accident: Roof bolting

Gibson Mine Employee: Yes

Years of Experience: 2 years 3 weeks

During roof bolting operations in the #1 Entry of Unit #3 section, a section of roof measuring 10' wide by 5' long and 0 to 10 inches thick fell from an unsupported area in front of the ATRS (Automatic Temporary Roof Support) and struck the roof bolter operator, pinning him against the ATRS cylinder.

# **Detailed Description of the Accident**

At approximately 6:30 a.m., the day shift crew entered the mine to join the miners who had come in on the early coal shift on Unit # 3. The # 3 Unit crew, including section foreman, Travis Burkett, and roof bolting machine operator, Justin Wilkin (victim), traveled to the Unit #3 to join the rest of the crew who had come in on the early coal shift. Wilkin normally operated the left boom of the roof bolting machine on the right side of the unit.

The unit is a ten entry advancing section that utilizes fish-tail ventilation. These units are commonly referred to as "Super Units". These units utilize two mining machines, two roof bolting machines, six coal haulers, and run as two coal loading units using this fish-tail

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ventilation with one crew on the left side of the unit and the other crew on the right side of the unit. On this day the second roof bolting machine operator for the right side of the unit was absent. To take the place of the absent operator, David Worstell, who normally worked on Unit #2, was instructed to go into Unit #3 to fill in on the right side bolter.

The early coal crews had mined coal in the #9 entry and the #1 entry of Unit #3. Wilkin went to the roof bolter, which was in the #4 entry and proceeded to move it to the #1 entry where a 40 foot cut had been made by the early coal crew which needed bolted. The section foreman, Travis Burkett, as he was examining the section, said he encountered Wilkin in the #4 entry and was informed by him that he was taking the roof bolter to the #1 entry. Worstell arrived on unit #3 and encountered Burkett at the section power center and was instructed by Burkett that he would be operating the roof bolter on the right side of the unit. Worstell proceeded to the #1 entry where Wilkin was operating the Fletcher Roof Ranger double-boom bolter (alone). Wilkin had installed two bolts on the left side of the entry and was in the process of installing the roof bolt closest to the rib on the right side of the entry. Wilkin finished installing the bolt nearest the rib on the right side and swung the roof bolting machine boom inward. Worstell thought that Wilkin was going to install the center roof bolt to complete the bolting pattern in that row of bolts. Worstell was standing on the right rear side near the middle of the machine cutting wires from bundles of roof bolts and bearing plates that were on the roof bolter. Very shortly Worstell heard a rock fall, and looking toward the front of the machine, he was unable to see Wilkin's cap light. Worstell ran to the front of the roof bolter and observed Wilkin pinned by a rock against the ATRS raise cylinder. Worstell attempted to lift the rock off of Wilkin, but could not. Worstell ran from #1 entry to #2 entry and shouted to several crew

members standing in the #4 entry that Wilkin was covered up and he needed help. A coal hauler operator, Chris Richardson, used his walkie talkie to inform the section foreman, Burkett, about the accident. Burkett traveled from the power center area to the #1 entry. As Burkett arrived at the roof bolter he met one of the unit miner operators, Jesse Fifer, who said he was going to get more help to move the rock. Fifer proceeded to go to #9 entry to obtain the left side crew's assistance. The crew members were finally able to lift the rock enough for Burkett to pull Wilkin free. Wilkin was unresponsive and did not have a pulse. Wilkin was placed on a backboard and carried around the left side of the bolter where he was placed on a stretcher and carried to the rear of the bolter. Two of the crew members, Fifer and Adam Harvey, began CPR on the victim. The victim was placed on a battery golf cart and transported to the mine haul road. The mine's underground ambulance met the golf cart two crosscuts outby the unit and the victim was transferred to the ambulance and transported to the surface, arriving outside at 8:09 a.m. central daylight time. Gibson County, Indiana EMS, transported the victim to the Gibson County Hospital where he was pronounced dead at 8:34 a.m. central daylight time.

## **Description of Investigation**

The investigation commenced on June 3, 2008. MSHA Inspectors Dean Cripps, lead investigator, and electrical inspector, Silver Dilorenzo, coal mine inspector, and Deputy Commissioner Indiana Bureau of Mines, Donald "Blink" McCorkle, entered the mine at 10:10 a.m. central daylight savings time and proceeded to the accident site to make sure it was secured and to gather available information while waiting for other MSHA personnel pertinent to the investigation to arrive at the mine. This investigation group exited the mine at approximately 11:15 a.m. central daylight savings time.

At this time the MSHA personnel, who were in route to the mine, and the state's chief mine inspector arrived at the mine site. They were Steve Miller, investigator, Mark Odum, roof control specialist, Jeff Williams, coal mine inspector, John Moore, coal mine inspector, and Steve Riley, Indiana Chief Mine Inspector.

The mine had the nine crew members who had information pertinent to the investigation stay at the mine site and they were interviewed by the investigating team. The interview process started approximately 12:00 p.m. central daylight savings time and the crew members were asked to give their accounts of what they remembered about the events leading up to the time of the fatality. There were no eyewitnesses to the accident. The interviews concluded at approximately 2:30 p.m. central daylight savings time. Additional interviews were conducted on June 4, 2008 and June 17, 2008.

The investigating team went back underground to Unit #3 at 3:30 p.m. central daylight savings time. The accident scene was inspected, roof bolt patterns measured, and the roof, roof bolting machine, and section were inspected. The entire area was checked. The team exited the mine at 6:55 p.m. central daylight savings time. Further investigations were made by MSHA technicians in the days following the incident to test the roof strata and geological conditions.

#### Cause

The cause of the accident was a section of roof measuring 10' wide by 5' long and 0 to 10 inches thick that fell from an unsupported area in front of the ATRS and struck the victim, pinning him against the ATRS cylinder. The victim traveled in front of the ATRS support beam to cross from the right side of the roof bolting machine to the left side, exposing himself to mine roof that was unsupported.

#### **Corrective Action Taken**

- 1. During roof bolting operations, when the ATRS is pressurized against unsupported roof, operators will not travel between left and right booms except by walking behind the machine.
  - 2. Two operators will be present on dual boom bolters while installing primary support.
- 3. Miners, except examiners and roof bolters, will not travel or work inby the second row of roof bolts outby unsupported roof.
- 4. All underground mining machine unit workers were trained regarding the hazards related to the revised company policy and the related mine roof hazards.

### **Conclusion**

The Indiana Department of Labor findings are that this fatality resulted in the victim traveling out from unsupported roof, which fell at that time and resulted in the death of the victim.